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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/776,972

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Bruce M. Russell

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EXAMINER

GRAHAM, GARY K

ART UNIT

PAPER NUMBER

3727

MAIL DATE

DELIVERY MODE

12/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/776,972	Applicant(s) RUSSELL ET AL.	
	Examiner Gary K. Graham	Art Unit 3727	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 5,6,9-12 and 15-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7,8,13,14 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 September 2008 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-3, 7, 13 and 14 are rejected under 35 U.S.C. 102(a) as being anticipated by Clemans (US patent 6,623,272).

The patent to Clemans discloses the invention, a toothbrush for creating a whitening effect, as is claimed. Clemans discloses a manual toothbrush (11,fig.1) comprised of a hollow handle (23), a cleaning head (13) attached to the handle and having an outer surface (17) with a bristle field (15) thereon. A UV light source (33) is provided in the handle and is coupled to a plurality of emitters (27) provided among the bristle field via "light pipes" (25). The light pipes transmit light from the source (33) to the emitters (27) and can be of any suitable material transparent to light.

Art Unit: 3727

With respect to claim 1, Clemans discusses using multiple light pipes (25) each extending from the light source (33) to emitters (27) at different locations (see column 3, lines 35-41) on the head. Clemans also discusses that the light source provides light in the spectrum preferably ranging from 350nm to about 500nm. UVA light is light below 400nm, thus the light source suggested by Clemans is a UV light source.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 3727

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clemans (US patent 6,623,272) in view of Iimura (US patent 6,675,425).

The patent to Clemans discloses the invention substantially as is claimed, as recited above, with the exception of the light source being a UV LED.

The patent Iimura discloses a photocatalytic brushing apparatus (figs.8,11) for activating a photocatalytic component. Iimura discloses that the brushing apparatus can be a toothbrush (see abstract). The apparatus includes a head (110) with brushes (10) thereon. A light source (220) comprised of LED's (220a) is provided in the head. Iimura discloses that UV light rays are generated by the light source or LED's. It should also be noted that LED's are well known light sources that can emit UV light.

While Clemans discloses the use of lamps to provide the UV light, to employ a different well known source such as LED's appears but a mere substitution of one well know light source for another. LED's are well known for their increased efficiency by a reduced power consumption over lamps. It would have been obvious to one of skill in the art to use a LED as the light source, which provides light in the UV spectrum, for the toothbrush of Clemans, as clearly suggested by Iimura **and** as is well known, to increase the efficiency of the toothbrush.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clemans (US patent 6,623,272) in view of Massholder et al (US patent 6,343,400).

The patent to Clemans discloses the invention substantially as is claimed, as recited above, with the exception of a switch on the handle to actuate the UV light source.

The patent Massholder discloses a toothbrush (2) with a UV light source (7) therein. A switch (11) is provided on the handle (6) to actuate the UV light source.

Art Unit: 3727

It would have been obvious to one of skill in the art to provide a switch on the handle of Clemens to control the light source, as clearly suggested by Massholder, to enable ready operation of the light source within the toothbrush. Further, it is noted that use of switches is well known to enhance ease of operation of electrical devices and to provide such on the device of Clemens would be well within that which one of skill in the art would find obvious.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clemans (US patent 6,623,272).

Clemans discloses all of the above recited subject matter with the exception of the light pipes including fiber optic devices to connect from the light source in the handle to the emitters.

Optical fiber is a well known light transmitting material transparent to visible light. Further, Clemans discloses use of optical fiber (71) to transmit light from an external light source to the emitters. Clemans discloses use of optical fiber as a light transmission element in toothbrushes.

It would have been obvious to one of skill in the art to use or employ optical fiber for the light pipes within the head of Clemans, to provide highly efficient light transmission, as is well established and suggested by Clemans. Use of optical fiber is well established to transmit light and is suggested by Clemans herself. Further, as Clemans suggest that any material can be used for the light pipes, use of optical fiber would be entirely obvious as such is a readily available light transmission element. Use of optical fiber within the head yields the results of efficient light transmission from a readily available element.

Art Unit: 3727

Response to Arguments

Applicant's 131 declaration is sufficient to antedate the Lin reference. As such, applicant has overcome the previous 103 rejection of claims **4 and 8** by the combination rejection which relied in part upon Lin. However, it should be noted that such was only relevant to claims 4 and 8. Note that the rejection of claims 1-3, 7, 13, 14 and 23 did not involve the use of the Lin reference. As such applicant's 131 declaration is ineffective against the rejection of these claims. Therefore, these rejections are still deemed tenable, as set forth above. Further, references to both Massholder et al and Iimura have been relied upon to rejection claims 4 and 8 as set forth above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary K. Graham whose telephone number is 571-272-1274. The examiner can normally be reached on Tuesday to Friday (7:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on 571-272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3727

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gary K Graham/
Primary Examiner, Art Unit 3727

GKG
09 December 2008